TEACHERS' RETIREMENT BOARD

REGULAR MEETING

SUBJECT: Adoption of June 30, 2001, Actuarial Valuation for the Defined Benefit Program **(Revised)**

ITEM NUMBER: 6a

ATTACHMENT(S): 2

ACTION: X

MEETING DATE: May 2, 2002

INFORMATION: ___

PRESENTER: Rick Reed

SUMMARY

At least every two years, the Consulting Actuary performs an actuarial valuation of the benefits provided under the Defined Benefit (DB) Program of the State Teachers' Retirement Plan. The actuarial valuation is usually performed at the conclusion of odd numbered fiscal years (although a special valuation was conducted using June 30, 1998 data, and again using June 20, 2000 data).

An actuarial valuation identifies the extent to which the current and future assets of the program are sufficient to pay the benefits promised by law. In addition to the Normal Cost Rate, which represents the cost of additional liabilities resulting from future service, the actuarial valuation identifies the Actuarial Obligation for benefits to current members and benefit recipients, which represents the cost of liabilities associated with service already performed. The Actuarial Obligation for benefits is then contrasted with the actuarial value of current assets to assess the adequacy of past funding. If the actuarial value of current assets is less than the Actuarial Obligation for accrued benefits, an Unfunded Actuarial Obligation exists. An Unfunded Actuarial Obligation can arise from inadequate contribution rates, increases in benefits and/or actual experience that differs from expected experience.

This year, in addition to the actuarial valuation of the DB Program, the Consulting Actuary has conducted an Actuarial Study of the Defined Benefit Supplement (DBS) Program of the State Teachers' Retirement Plan. Following are the results of the actuarial valuation of the DB Program as well as the actuarial study of the DBS Program.

DB Program Actuarial Valuation

The actuarial valuation that is being presented to the Teachers' Retirement Board (Board) identifies assets and liabilities and the Normal Cost of the DB Program as of June 30, 2001, based on assumptions adopted by the Board at the February 2000 Board meeting. These assumptions modified the method by which assets are valued, reduced the projected rate of inflation and wage increases, and made largely offsetting changes in demographic assumptions. The valuation indicates that the DB Program had an Unfunded Actuarial Obligation, as of June 30, 2001, of $2.2 billion. In addition, the program had a Normal Cost surplus of .62 percent, after reducing DB Program contributions to reflect the redirection of contributions to the Defined Benefit Supplement Program and the Medicare Premium Payment Program.

There were two principal causes of the Unfunded Actuarial Obligation—a rate of investment return in 2000-01 that was more than 17 percentage points below the actuarially assumed rate, and a level of creditable earnings by DB Program members in 2000-01 that was 8.75 percentage points higher than expected, largely because the rate of salary growth significantly exceeded the Board's adopted assumptions. Nonetheless, the Consulting Actuary's analysis of the DB Program indicates that, given current assumptions, the $2.2 billion Unfunded Actuarial Obligation will be amortized in 29 years, which is within the funding period normally used by the Board to determine the adequacy of resources for benefits.

The Consulting Actuary, Mark O. Johnson, FSA, of Milliman USA, will present the Actuarial Valuation Report as of June 30, 2001 to the Board.

DBS Program Actuarial Study Report

Section 22311.5 of the Education Code requires an annual actuarial valuation of the benefits provided under the DBS Program. The Consulting Actuary performs this valuation. This is the first year for the DBS Program, and not enough data exists to provide for a valuation this year. Therefore, the Consulting Actuary has conducted a study of the accumulated contributions with interest as of the valuation date, and compared the result with the fair market value of assets.

An actuarial study identifies the Actuarial Obligation for benefits to current members and benefit recipients, which represents the cost of liabilities associated with service already performed. The Actuarial Obligation for benefits is then contrasted with current assets (the actuarial value of assets) to assess the adequacy of past funding. If the actuarial value of assets is less than the Actuarial Obligation for accrued benefits, an Unfunded Actuarial Obligation exists. An Unfunded Actuarial Obligation can arise in the DBS Program if investment returns are less than the minimum interest rate paid to program participants or if actual non-investment experience differs from expected experience. The study also indicates the amounts available to fund the Gain and Loss Reserve and any additional earnings credit or any additional annuity credit to be declared by the Board.

The actuarial study that is being presented to the Board identifies assets and liabilities of the DBS Program as of June 30, 2001, based on assumptions adopted by the Board for the DB Program at the February 2000 Board meeting. Both the DB Program and the DBS Program share the same population, so it is reasonable to use most of the same assumptions for both programs. The study indicates that the DBS Program had an Unfunded Actuarial Obligation, as of June 30, 2001, of $6.2 million. The principal cause of the Unfunded Actuarial Obligation is that the assumed earnings rate on investments is 8 percent per year, while the actual return for the year was about –3 percent. This investment loss was, however, partially offset by the 6.25 percent Minimum Interest Rate being less than the assumed interest rate of 8 percent. The Consulting Actuary expects that, in the long run, investment returns will exceed the interest rate and other amounts credited to DBS Program accounts to eliminate this Unfunded Actuarial Obligation. Nonetheless, as a result of the Unfunded Actuarial Obligation, the consulting Actuary does not recommend that an Additional Earnings Credit be granted at this time.

The Consulting Actuary, Mark O. Johnson, FSA, of Milliman USA, will present the Actuarial Study as of June 30, 2001 to the Board.

RECOMMENDATION

Staff recommends the Board adopt the June 30, 2001 Actuarial Valuation Report for the DB Program. Staff also recommends the Board adopt the June 30, 2001 Actuarial Study of the DBS Program.

Attachment 1
Regular Meeting Item – 6a
May 2, 2002

PROPOSED
RESOLUTION
OF THE
TEACHERS' RETIREMENT BOARD

SUBJECT: Adoption of June 30, 2001, Actuarial
Valuation for the Defined Benefit Program

RESOLUTION NO. _____

WHEREAS, Section 22311 of the Education Code requires a periodic actuarial valuation of the California State Teachers' Retirement System's assets and liabilities; and

WHEREAS, Milliman USA has performed the necessary actuarial calculations using the June 30, 2001 data provided by the California State Teachers' Retirement System; and

WHEREAS, the Teachers' Retirement Board has reviewed the June 30, 2001 Actuarial Valuation Report presented by Milliman USA; therefore, be it

RESOLVED that the Teachers' Retirement Board adopts the accompanying Actuarial Valuation Report from Milliman USA.

Adopted by:
Teachers' Retirement Board

on May 2, 2002

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JACK EHNES
Chief Executive Officer

PROPOSED
RESOLUTION
OF THE
TEACHERS' RETIREMENT BOARD

SUBJECT: Adoption of June 30, 2001, Actuarial
Study for the Defined Benefit Supplement Program

RESOLUTION NO. _____

WHEREAS, Section 25001 of the Education Code requires an annual actuarial valuation of the California State Teachers' Retirement System's assets and liabilities with respect to the Defined Benefit Supplement Program; and

WHEREAS, Milliman USA. has performed a study using the June 30, 2001 data provided by the California State Teachers' Retirement System; and

WHEREAS, the Teachers' Retirement Board has reviewed the June 30, 2001 Actuarial Study Report presented by Milliman USA; therefore, be it

RESOLVED that the Teachers' Retirement Board adopts the accompanying Actuarial Study Report from Milliman USA.

Adopted by:
Teachers' Retirement Board

on May 2, 2002

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JACK EHNES
Chief Executive Officer